DEVELOPMENT SERVICES DEPARTMENT
ENVIRONMENTAL COORDINATOR
450 110th Ave NE
BELLEVUE, WA 98009-9012

DETERMINATION OF NON-SIGNIFICANCE

PROPONENT: Katie Teplicky

LOCATION OF PROPOSAL: 16980 SE 45th St, 17550 SE 45th St, and 4641 171st Ave SE

DESCRIPTION OF PROPOSAL: Execution of vegetation management operations within the Native Growth Protection Areas (NGPA) as part of the Vuemont Vista Plat. The project is a continuation of prior approved vegetation management but contains updated recommendations for Zone 3 based on plan performance and creation of a new zone (Zone 4) for work to occur.

FILE NUMBERS: 18-120936-LO **PLANNER:** David Wong

The Environmental Coordinator of the City of Bellevue has determined that this proposal does not have a probable significant adverse impact upon the environment. An Environmental Impact Statement (EIS) is not required under RCW 43.21C.030(2)(C). This decision was made after the Bellevue Environmental Coordinator reviewed the completed environmental checklist and information filed with the Land Use Division of the Development Services Department. This information is available to the public on request.

☐ There is no comment period for this DNS. There is a 14-day appeal period. Only persons who submitted written comments before the DNS was issued may appeal the decision. A written appeal must be filed in the City Clerk's office by 5:00 p.m. on _____.

☒ This DNS is issued after using the optional DNS process in WAC 197-11-355. There is no further comment period on the DNS. There is a 14-day appeal period. Only persons who submitted written comments before the DNS was issued may appeal the decision. A written appeal must be filed in the City Clerk's Office by 5 p.m. on **4/25/2019**

☐ This DNS is issued under WAC 197-11-340(2) and is subject to a 14-day comment period from the date below. Comments must be submitted by 5 p.m. on _____. This DNS is also subject to appeal. A written appeal must be filed in the City Clerk's Office by 5:00 p.m. on _____.

This DNS may be withdrawn at any time if the proposal is modified so as to have significant adverse environmental impacts; if there is significant new information indicating a proposals probable significant adverse environmental impacts (unless a non-exempt license has been issued if the proposal is a private project): or if the DNS was procured by misrepresentation or lack of material disclosure.

Heidi M Bedwell

Environmental Coordinator
Elizabeth Stead

4/11/2019
Date

OTHERS TO RECEIVE THIS DOCUMENT:
☒ State Department of Fish and Wildlife / Stewart.Reinbold@dfw.gov; Christa.Heller@dfw.wa.gov;
☐ State Department of Ecology, Shoreline Planner N.W. Region / Jobu461@ecy.wa.gov; sepaunit@ecy.wa.gov
☐ Army Corps of Engineers Susan.M.Powell@nws02.usace.army.mil
☒ Attorney General ecyolyef@atg.wa.gov
☒ Muckleshoot Indian Tribe Karen.Walter@muckleshoot.nsn.us; Fisheries.fileroom@muckleshoot.nsn.us

City of Bellevue
Development Services Department
Land Use Staff Report

Proposal Name:	**Vuemont VMP**
Proposal Addresses:	**16980 SE 45th St, 17550 SE 45th St, and 4641 171st Ave SE**
Proposal Description:	The applicant requests a Critical Areas Land Use Permit approval for Vegetation Management within the Native Growth Protection Areas (NGPA) as part of the Vuemont Vista Plat. The project is a continuation of prior approved vegetation management but contains updated recommendations for Zone 3 based on plan performance and creation of a new zone (Zone 4) for work to occur.
File Number:	**18-120936-LO**
Applicant:	**Katie Teplicky**
Decisions Included:	Critical Areas Land Use Permit (Process II. LUC 20.30P)
Planner:	**David Wong**, Land Use Planner
State Environmental Policy Act Threshold Determination:	**Determination of Non-Significance** Elizabeth Stead, Environmental Coordinator Development Services Department
Director's Decision:	**Approval with Conditions** Elizabeth Stead, Land Use Director Development Services Department

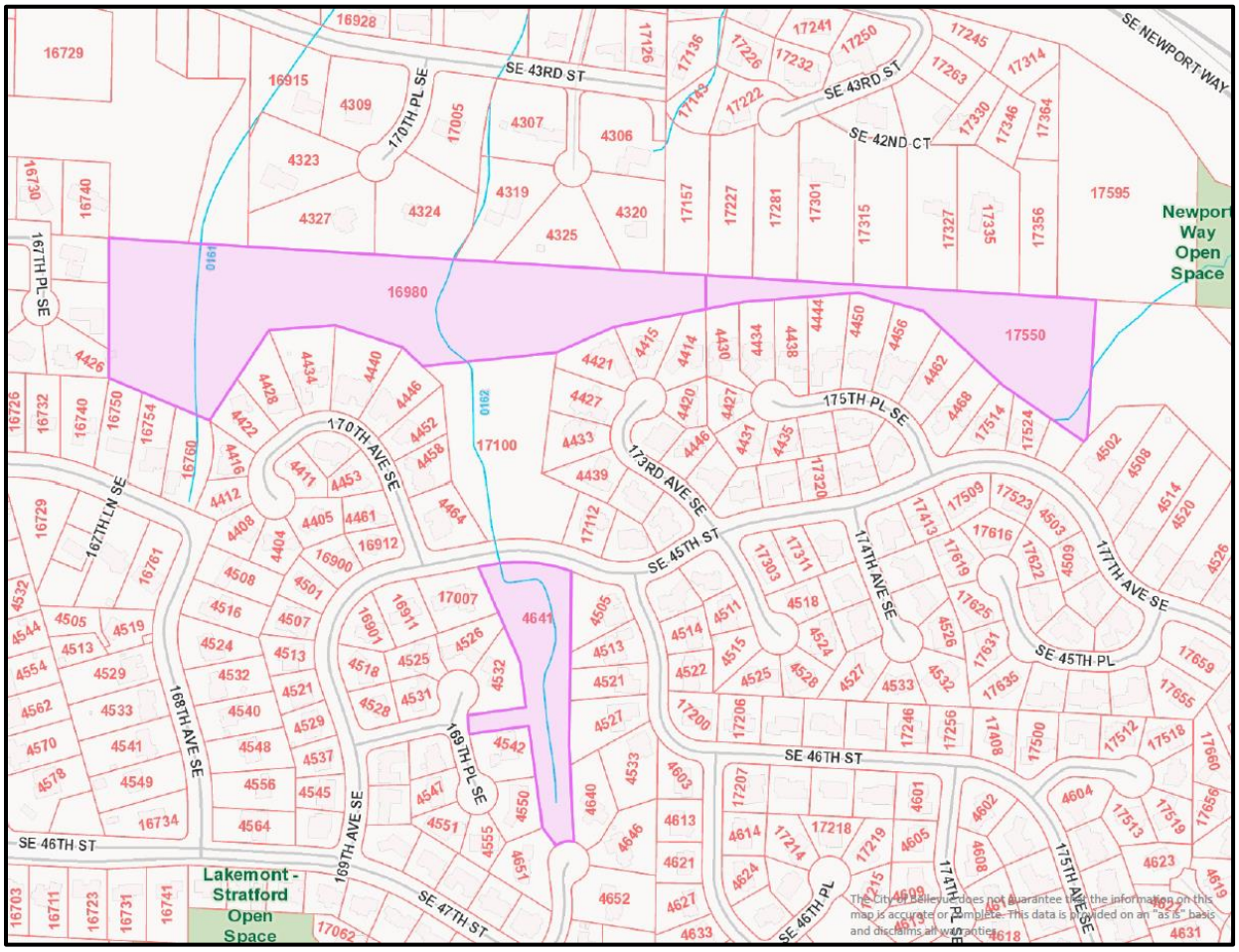
Application Date:	August 13, 2018
Notice of Application Publication Date:	October 18, 2018
Decision Publication Date:	April 11, 2019
Project/SEPA Appeal Deadline:	April 25, 2019

For information on how to appeal a proposal, visit Development Services Center at City Hall or call (425) 452-6800. Comments on State Environmental Policy Act (SEPA) Determinations can be made with or without appealing the proposal within the noted comment period for a SEPA Determination. Appeal of the Decision must be received in the City's Clerk's Office by 5 PM on the date noted for appeal of the decision.

I. Proposal Description

The applicant is requesting a Critical Areas Land Use Permit (CALUP) to continue vegetation management operations within Zones 1 and 2; modify vegetation management operations in Zone 3 based on past performance; and to create a new zone (Zone 4) to conduct recommended hazardous tree abatement. The proposal covers King County tax parcels 8965501000, 8965510335, and 8965501010, and includes guidelines for tree pruning; hazard tree removal and replacement; restoration and mitigation planting of steep slope, stream, wetland critical areas and buffers; and monitoring.

Per LUC 20.25H.055.C.3.(i)iv a CALUP is required because the proposed vegetation management activities are located within a critical area and critical area buffer and a NGPA.




Zone 1
Zone 3A
Zone 2
Zone 3B
Zone 3C
ZONE 3A
ZONE 3B
ZONE 2
PART OF ZONE 3A NOT INVENTORIED
175TH PL SE
SE 45TH ST
SE 43RD ST


Zone 3B
Zone 3B
175TH PL SE
SE 45TH ST

II. Consistency with Land Use Code Requirements

Vegetation Management Plan Performance Standards LUC 20.25H.055.C.3.v.i

(A) Is the Vegetation Management Plan prepared by a qualified professional?

Yes ☒ or No ☐

Describe:

Plan Preparer's Name: Jeff Boyce, CF
Company: Meridian Environment, Inc.
Address: 11415 NE 128th St Ste. 110, Kirkland, WA 98034
Phone: 206-522-8282
Statement of Qualifications: CF – Forest Ecologist

Addendum Plan Preparer's Name: Bob Layton
Company: American Forest Management (AFM)
Address: 2136 Westlake Ave N., Seattle, WA 98109
Phone: 425-820-3437
Statement of Qualifications: Senior Arborist/Forester

Wetland & Stream Reconnaissance: Anna Hoenig & Sam Payne
Company: The Watershed Company

Address: 750 Sixth Street South, Kirkland, WA 98033
Phone: 425.822.5242
Statement of Qualifications: Professional Wetland Scientist & Ecologist

(B) Does the Vegetation Management Plan include the following?

(1) A description of existing site conditions, including existing critical area functions and values;

Yes ☒ or No ☐

Describe: The primary function of vegetation is to maintain slope stability; provide habitat opportunities; maintain stormwater quality for the wetland and streams; and buffer development from the steep slope geologic hazards, streams, and wetlands. The steep slope critical areas and buffers on the site have been identified and documented to contain moderate function due to native plant diversity, but non-native, invasive, and ornamental vegetation have been identified in all zones, including the proposed new Zone 4.

(2) A site history;

Yes ☒ or No ☐

Describe: The Vuemont Vista development was approved by King County in 1981 and included several NGPA tracts containing steep slopes, streams, and a wetland. Select vegetation pruning and removal for views, allowed by the conditions on the face of the plat, was conducted by the homeowners association between 1981 and 1995. In 1995 the Vuemont subdivisions were annexed by the City of Bellevue. On June 15, 2006, the City issued a SEPA Determination of Non-significance (DNS) for work to be conducted under the 2006 Vegetation Management Plan (VMP) authored by Meridian Environmental, Inc. and on July 12, 2007 approved a Clearing & Grading Permit (07-111488-GB) to conduct vegetation work under the approved VMP.

(3) A discussion of the plan objectives;

Yes ☒ or No ☐

Describe: The general objective of the plan is to establish allowances and requirements for vegetation alteration, removal, and replacement, including hazard tree abatement, in keeping with the original VMP intent and considering long-term health and character of the neighborhood. The subject plan includes adjusted recommendations for Zone 3 based on past VMP performance, and specific hazardous tree recommendations for Zone 4. This plan is specific to Zones 1, 2, 3 (A, B, and C), and 4.

(4) A description of all sensitive features;

Yes ☒ or No ☐

Describe: The site contains geologic hazard steep slopes, a Type-F stream (identified as 0161), a Type-N stream (identified as 0162), a Catergory II wetland, and their associated buffers. See the attached Vegetation Management Plan (Section 2.2) and stream and

wetland inventory information from The Watershed Company for a more detailed description of all critical areas and their buffers.

(5) Identification of soils, existing vegetation, and habitat associated with species of local importance present on the site;
Yes ☒ or No ☐
Describe: Soils at the site have been mapped as Alderwood greavelly sandy loam (AgD); Alderwood and Kitsap soils (AkF); Beausite gravelly sandy loam (BeC); and Beausite gravelly sandy loam (BeD).

Vegetation at the site was observed and documented to contain a mix of natives, including but not limited to, vine maple (*Acer circinatum*), Douglas-fir (*Pseudotsuga menziesii*), bigleaf maple (*Acer macrophyllum*), Oregon-grape (Mahonia nervosa) and snowberry (*Symphoricarpos albus*), and a non-native and invasive species (See Section 3.3 Table 2).

(6) Allowed work windows;
Yes ☒ or No ☐
Describe: The applicant has requested a 7-year life of the Vegetation Management Plan, and has provided detailed information regarding actions that can occur within each of the seven years. See Section VII for conditions of approval.

(7) A clear delineation of the area within which clearing and other vegetation management practices are allowed under the plan; and
Yes ☒ or No ☐
Describe: Zone maps are included in the addendum report provided by AFM.

(8) Short- and long-term management prescriptions, including characterization of trees and vegetation to be removed, and restoration and revegetation plans with native species, including native species with a lower growth habit. Such restoration and revegetation plans shall demonstrate that the proposed Vegetation Management Plan will not significantly diminish the functions and values of the critical area or alter the forest and habitat characteristics of the site over time.
Yes ☒ or No ☐
Describe: The plan provides short- and long-term management goals for vegetation located within Zones 1, 2, and 3 in keeping with the intent of the previously approved vegetation management plan but with modifications to address performance issues of the previous plan. Short- and long-term goals and objectives have been developed for Zone 4 with a focus on abating and mitigating hazardous trees located within the wetland and wetland buffer. In areas where vegetation is proposed to be altered or removed in or around steep slopes, streams, wetland, and their buffers the plan provides decision criteria in order to avoid impacts and to mitigate minimized impacts.

(C) Would any proposed tree removal result in a significant impact to habitat associated with species of local importance?
Yes ☐ or No ☒
Describe: With the replanting described in the Vegetation Management Plan, the tree removal is not expected to have significant impact on habitat associated with species of local importance.

If yes, can the impacted function be replaced elsewhere within the management area subject to the plan?
Yes ☐ or No ☒
Describe:

In no event may a tree or vegetation which is an active nest site for a species of local importance be removed pursuant to this subsection. State and federal guidelines and requirements still apply, including, but not limited, Migratory Bird Treaty Act (MBTA) and Endangered Species Act (ESA)

(D) Is the area under application subject to any applicable neighborhood restrictive covenants that address view preservation or vegetation management? The existence of and provisions of neighborhood restrictive covenants shall not be entitled to any more or less weight than other reports and materials in the record.
Yes ☒ or No ☐
If yes, describe: The HOA CC&Rs and conditions on the face of the plat include requirements for vegetation management for views. The VMP goal is to continue vegetation management under conditions of the plat while meeting City of Bellevue Critical Areas Ordinance requirements for modifying vegetation within critical areas and critical area buffers.

III. Public Notice and Comment

Application Date:	August 13, 2018
Public Notice (500 feet):	October 1, 2018
Minimum Comment Period:	October 24, 2018

The Notice of Application for this project was published in the City of Bellevue weekly permit bulletin on October 10, 2018. It was mailed to property owners within 500 feet of the project site. No comments have been received from the public as of the writing of this staff report.

IV. State Environmental Policy Act (SEPA)

The environmental review indicates no probability of significant adverse environmental impacts occurring as a result of the proposal. The attached Environmental Checklist submitted with the application adequately discloses expected environmental impacts associated with the project. The City codes and requirements, including the Clear and Grade Code, Utility Code, Land Use Code, Noise Ordinance, Building Code and other construction codes are expected to mitigate

potential environmental impacts. Therefore, issuance of a Determination of Non-Significance (DNS) is the appropriate threshold determination under the State Environmental Policy Act (SEPA) requirements.

V. Critical Areas Land Use Permit Decision Criteria LUC 20.30P.140

The Director may approve or approve with modifications an application for a Critical Areas Land Use Permit if:

A. The proposal obtains all other permits required by the Land Use Code; and
Yes ☒ or No ☐
Describe: The proposal is required to obtain a Clearing & Grading Permit in Critical Areas Permit (GJ) prior to commencing work under this proposal.

B. The proposal utilizes to the maximum extent possible the best available construction, design and development techniques which result in the least impact on the critical area and critical area buffer; and
Yes ☒ or No ☐
Describe: The proposal utilizes the best available design for vegetation management with respect to the 2006 VMP; performance metrics of the 2006 VMP; critical areas handbook requirements; and hazardous tree abatement & mitigation.

C. The proposal incorporates the performance standards of Part 20.25H LUC to the maximum extent applicable; and
Yes ☒ or No ☐
Describe: As discussed in Section II, the proposal has demonstrated compliance with the performance standards for vegetation management within a critical area.

D. The proposal will be served by adequate public facilities including streets, fire protection, and utilities; and
Yes ☒ or No ☐
Describe: The site is currently served by adequate public facilities. The proposal will not increase the need for public facilities on the site.

E. The proposal includes a mitigation or restoration plan consistent with the requirements of LUC 20.25H.210; except that a proposal to modify or remove vegetation pursuant to an approved Vegetation Management Plan under LUC 20.25H.055.C.3.i shall not require a mitigation or restoration plan; and
Yes ☒ or No ☐
Describe: The proposal includes a previously approved vegetation management planting plan meeting the recommendations of the Critical Areas Handbook and that is consistent with the requirements of LUC 20.25H.210. **See section VII for conditions of approval.**

F. The proposal complies with other applicable requirements of this code.
Yes ☒ or No ☐
Describe: Demonstration of compliance with the other applicable requirements of the Bellevue City Code will be completed under the review of the required clearing and grading permit.

VI. Conclusion and Decision

After conducting the various administrative reviews associated with this proposal, including Land Use Code consistency, SEPA, City Code and Standard compliance reviews, the Director of the Development Services Department does hereby **approve with conditions** the vegetation management plan within 16980 SE 45th St, 17550 SE 45th St, and 4641 171st Ave SE.

Note- Expiration of Approval: In accordance with LUC 20.30P.150.B, the Critical Areas Land Use Permit for Vegetation Management is valid for a period of no greater than seven (7) years after the effective date of the approval. The approval is not subject to extension provision of LUC 20.30P.155.

VII. Conditions of Approval

The applicant shall comply with all applicable Bellevue City Codes and Ordinances including but not limited to:

Applicable Ordinances	Contact Person
Clearing and Grading Code- BCC 23.76	Janney Gwo 425-452-6190
Land Use Code- BCC 20.25H	David Wong, 425-452-4282
Noise Control- BCC 9.18	David Wong, 425-452-4282

The following conditions are imposed under the Bellevue City Code or SEPA authority referenced:

1. Clearing & Grading Permit Required: A Clearing & Grading Permit is required to conduct work specified in this plan, and may occur under one permit or a series of permits provided the proposal does not exceed the limitation of this plan.

Authority: Land Use Code 20.30P.140
Reviewer: David Wong, Land Use

2. Mitigation/Replacement Plan: A mitigation/replacement plan conforming to the requirements of Section 4 & 5 of the Meridian VMP and Section IV of the AFM Addendum shall

be included with all Clearing & Grading Permit applications. Plans shall meet all requirements for submission as specified on the Forms and Publications webpage on the City's website.

Authority: Land Use Code 20.25H.220.B
Reviewer: David Wong, Land Use

3. Reporting: A report summarizing all activities shall be submitted to the City prior to the approval of any Clearing & Grading Permit applied for while the vegetation management plan is active. The reporting shall be in conformance with Section 5 of the VMP (Attached). The reports can be sent to David Wong at dwong@bellevuewa.gov or the address below:

Environmental Planning Manager
Development Services Department
City of Bellevue
PO Box 90012
Bellevue, WA 98009-9012

Authority: Land Use Code 20.25H.220.D
Reviewer: David Wong, Land Use

4. Rainy Season restrictions: Due to the proximity to steep slope and stream critical areas, no clearing and grading activity may occur during the rainy season, which is defined as October 1 through April 30 without written authorization of the Development Services Department. Should approval be granted for work during the rainy season, increased erosion and sedimentation measures, representing the best available technology must be implemented prior to beginning or resuming site work.

Authority: Bellevue City Code 23.76.093.A
Reviewer: Janney Gwo, Clearing and Grading

5. Pesticides, Insecticides, and Fertilizers: The applicant must submit as part of the required Clearing and Grading Permit information regarding the use of pesticides, insecticides, and fertilizers in accordance with the City of Bellevue's "Environmental Best Management Practices".

Authority: Land Use Code 20.25H.220.H
Reviewer: David Wong, Land Use

Vegetation Management Plan

Vuemont Vista
Native Growth Protection Area

Prepared by

Jeff Boyce, CF
Forest Ecologist

Meridian Environmental, Inc.

and

Ken Moyle
President
Vuemont
Homeowners Association

April 2006

By signing and dating this document, both parties agree to the terms and conditions outlined therein.

Signatures:

X_____

Morgan Nichols, Associate Planner, for the City of Bellevue Department of Planning and Community Development

Vuemont Homeowners Association

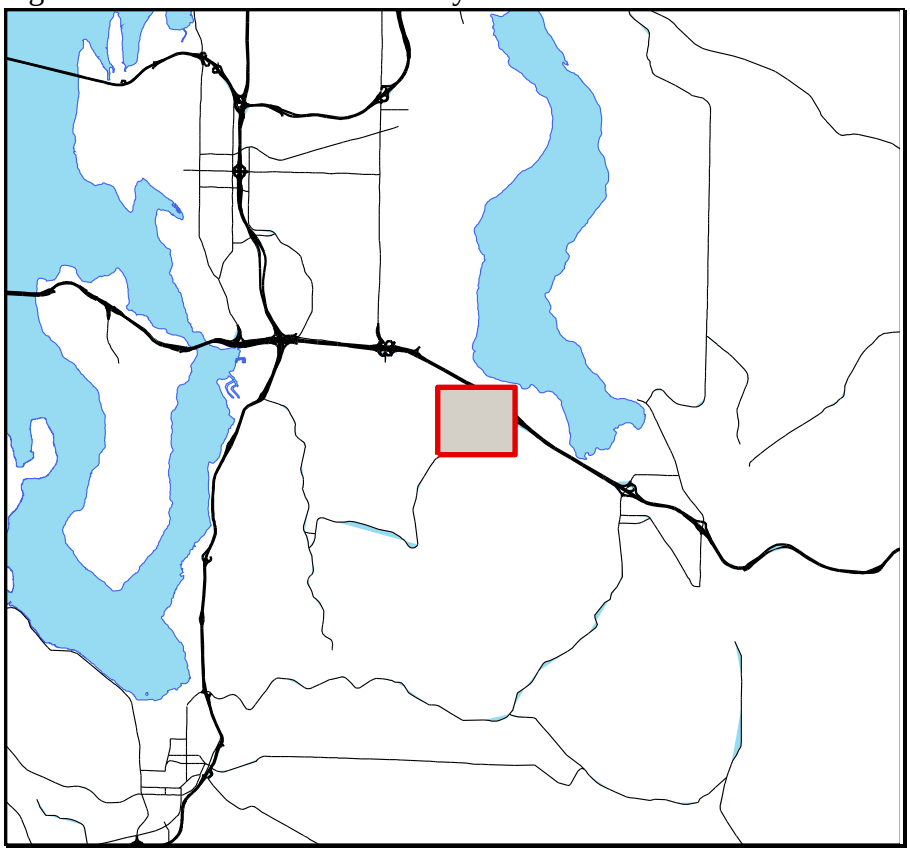
X_____
Ken Moyle, Representative for the Vuemont Vista Homeowners Association

1 INTRODUCTION AND SITE DESCRIPTION

The purpose of this plan is to describe a long-term strategy for management of vegetation and scenic resources on 10 acres of privately owned land in the Vuemont Vista subdivision. The existing environmental resources on the site are described. Goals, objectives, and desired future conditions of the overall site within the subject parcels are defined, along with treatment recommendations to achieve the desired future conditions.

The Vuemont Vista ("Vuemont") development is located in southeast Bellevue, immediately south of Interstate 90 and east of Lakemont Blvd, on a hill overlooking Lake Sammamish (Figure 1-1).

Figure 1-1. Vuemont Vista Vicinity



The subject property consists of two contiguous tax parcels that form the northern boundary of the Vuemont development (Figure 1-2). Vuemont Vista Div. 1 Tract A (Parcel # 8965501000) is located adjacent to home sites on the north side of 170th Ave. SE and 173rd Ave SE. Vuemont Vista Div. 2 Tract A (Parcel # 8965510335) is located adjacent to home sites on the north side of 175th Place SE (Figure 1-3). The storm water retention pond and surrounding area to the South of Tract A, between 170th and 173rd Ave. SE, is owned and managed by the City of Bellevue.

Figure 1-2. Vuemont Native Growth Protection Area Parcels.

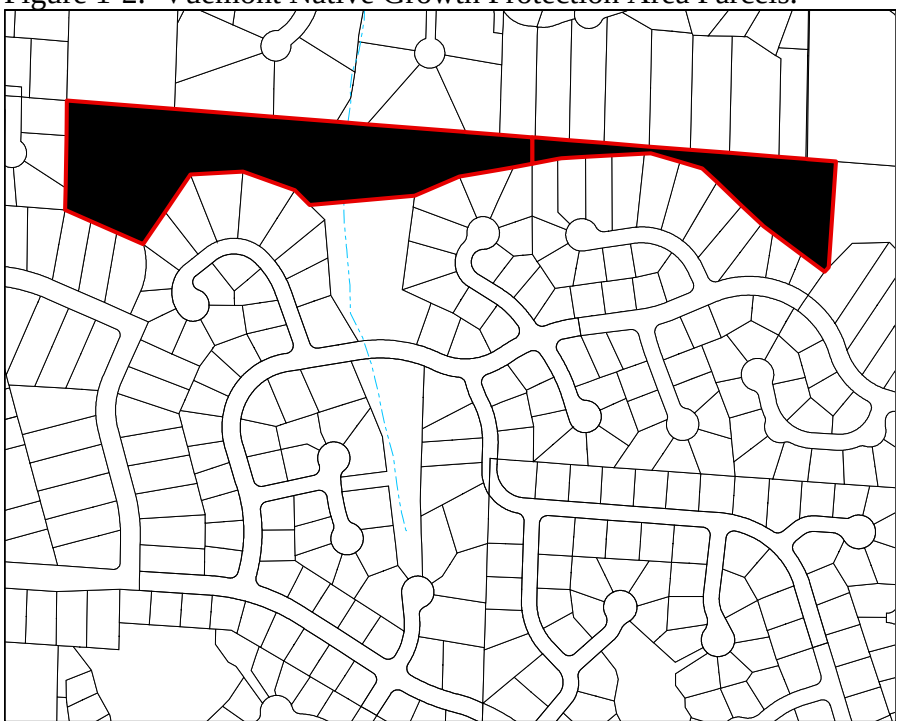
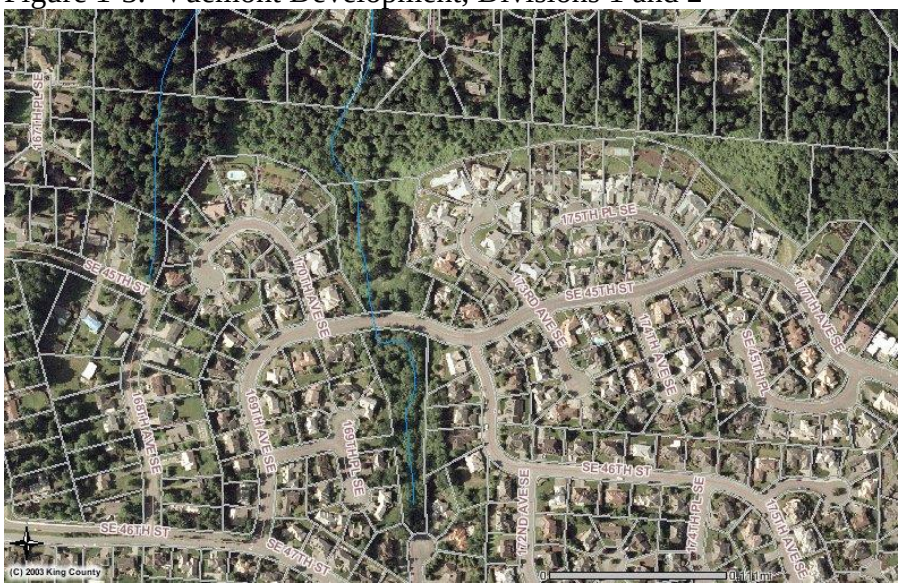


Figure 1-3. Vuemont Development, Divisions 1 and 2



2 EXISTING SITE CONDITIONS

2.1 Development

The Vuemont Vista development was approved by King County in July 1981, with complete build-out of the first phase occurring in 1986. Homes immediately adjacent to the NGPA tracts are located at the top of a hill slope that creates an opportunity for

extensive views from the east to the west. Homes immediately adjacent to the NGPA tracts have a view ranging from the Cascade Mountains to the east, Lake Sammamish to the north, and the downtown Bellevue skyline to the west. The view at individual residences may have restricted sightlines due to the orientation of the home, the position of adjacent homes, or the growth of vegetation over time.

The declaration of conditions, covenants, and restrictions ("CCRs") for the Vuemont Vista subdivision includes an article describing the treatment of common areas within the development. The description of common areas written for all Vuemont Vista divisions and development phases is the same. The description for Division 1, which includes NGPA Tract 1A, is provided below (Vuemont Vista, 1981).

> Common Areas. All areas in Vuemont Vista Division No. 1 which are not residential sites or streets are hereby designated "common areas" for the purposes of this Declaration. The owners of residential sites in the subdivision shall be financially responsible for the cost of maintaining the common areas *in a manner legally required by King County pursuant to a native growth protection easement of record*, to be found on the recorded plat, which maintenance shall be provided by and through Arco or its successor non-profit corporation. *Maintenance of the common areas* shall include, but is not limited to, removal of diseased or dangerous plantings and trees and removing, topping, limbing and trimming of trees *for the purpose of maintaining a view of the Cascade Mountains, Lake Sammamish and downtown Bellevue, which are rights reserved* hereunder to the owners of residential sites, Arco and its successor (emphasis added).

The Vuemont divisions were annexed by the City of Bellevue in 1995. The City of Bellevue Land Use Code prohibits tree removal within a Native Growth Protection Area unless a hazardous situation is identified by a certified arborist or the tree removal is within the context of an overall Management Plan for the NGPA tract or easement (LUC 20.25H.070C). However, the final plat documents for Vuemont Vista Divisions 1 and 2 contain specific provisions on their face for selective tree cutting. The final plat for Division 1 allows for "selected tree cutting as permitted in the Declaration of Conditions, Covenants and Restrictions," and the final plat for Division 2 allows for "selected tree cutting and removal of dangerous or diseased trees." Although the City does not recognize CCR's, it does enforce conditions that are stated on the face of the plat. As such, this provides the opportunity to develop a Vegetation Management Plan for this site. The parties agree that the future management of Vuemont Vista NGPA areas (Tract 1A and Tract 1B) within Vuemont will be managed as set forth in this agreement. By entering into this agreement, Vuemont Homeowners Association does not waive any rights or obligations that appear on the face of the final plat for Vuemont Vista Divisions 1 and 2.

2.2 Sensitive Area Overlay District

Parts of the Vuemont Vista Division 1 and 2 NGPA tracts are located within the City of Bellevue's Sensitive Area Overlay District due to the presence of streams and steep slope

areas. Division 1 Tract A (Tract 1A) is inventoried in the City of Bellevue Sensitive Areas Notebook, while Division 2 Tract A (Tract 2A) is not. The City of Bellevue requires a 50-foot top of slope setback from slopes 40% or greater in grade and a 50-foot primary setback from the top of bank for Type A streams. These areas, including their primary setbacks, are considered to be Protected Areas, according to the City of Bellevue Land Use Code.

King County has identified erosion and landslide hazards on both tracts. The City of Bellevue Land Use Code designates areas of colluvial or landslide deposit on slopes of 15 percent or more in grade, together with a primary setback of 75-feet from the toe-of-slope as protected areas.

No wetlands have been mapped for the area. As mentioned, Tract 1A is in the Sensitive Areas Notebook and Tract 2A is not. However, Tract 1A contains two streams that flow from south to north bisecting the tract in the western third and near its center. These streams have been classified as TypeA riparian corridors because they are salmon bearing streams in the mid and lower reaches and segments such as that on the Vuemont Vista property that do not contain salmon possess characteristics conducive to providing sustainable fish habitat. The eastern-most stream within Tract 1A was identified as stream 0161 as part of the 1987 Sensitive Areas Notebook inventory. Lower segments of both streams contain cutthroat trout and significant habitat for salmon. The stream segments present within Tract 1A are near the headwaters of each stream which are fed through seeps and wetlands within and adjacent to the Vuemont Vista subdivision. Type A streams together with a 50-foot setback from the top of bank are designated as protected areas (as shown in Section 2.5).

2.3 Soils

There are two primary soil associations present within the NGPA parcels; the Alderwood Association and the Beausite-Alderwood Association (SCS 1973). The two associations consist of four primary soil types mapped by the Natural Resource Conservation Service (figure 2-1). The following is a generalized description of each soil association found on the site:

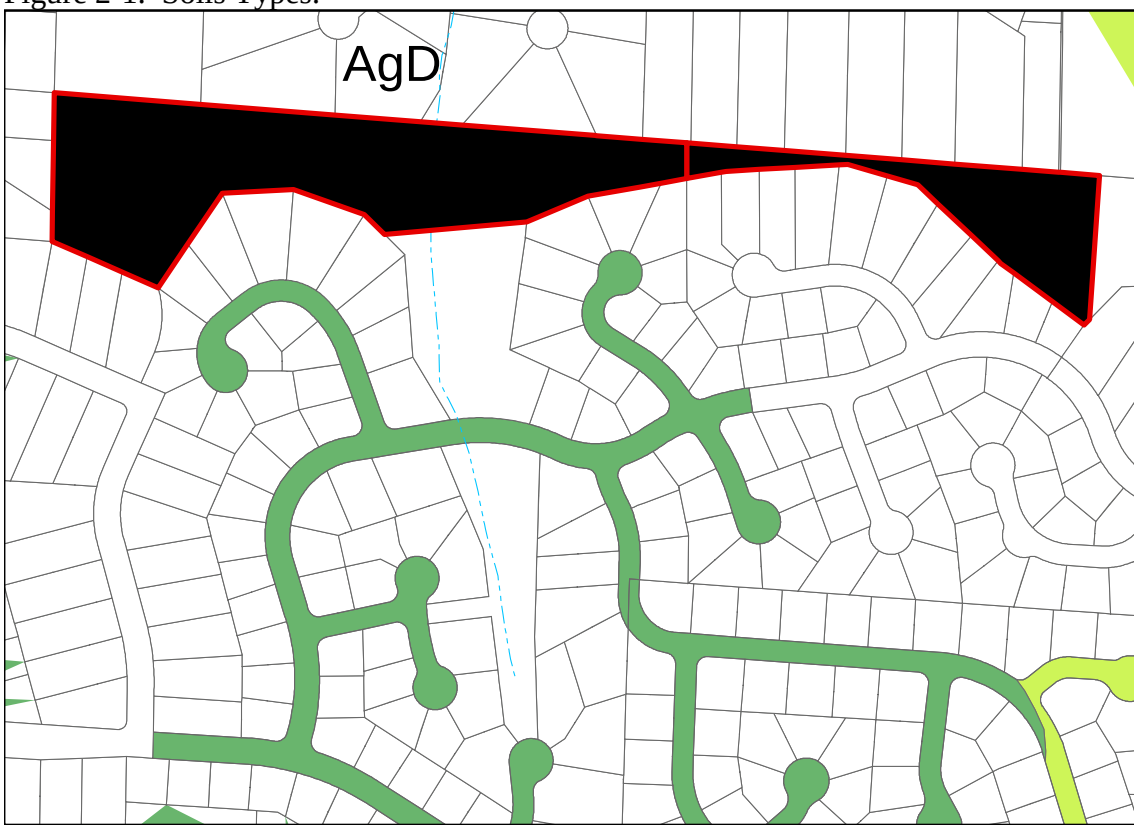
AgD – Alderwood gravelly sandy loam, 15-30 percent slopes. This soil is a moderately well drained gravelly sandy loam that is commonly 40 inches deep over consolidated glacial till. Runoff is rated as medium and the erosion hazard is severe. The slippage potential of these soils is moderate. This soil is well suited for pasture and timber production, with pasturelands occurring on lower slopes. Urban development is common on this soil type as the limitation for home site development is moderate.

AkF – Alderwood and Kitsap soils, very steep. This soil is moderately well drained gravelly sandy loam approximately 24 to 40 inches deep over consolidated glacial till. This soil type varies greatly within short distances and often includes some areas of Kitsap silt loam. Drainage and permeability of this soil type varies. Runoff is rapid to very rapid, and the erosion hazard is severe to very severe. The slippage potential for this soil is severe. This soil type is primarily used for timber production.

BeC – Beausite gravelly sandy loam, 6-15 percent slopes. This soil is moderately well to well drained on gently rolling to very steep slopes. The gravelly sandy loams are approximately 20-40 inches deep over sandstone. Roots penetrate easily to the depth of bedrock and will extend in to bedrock where fractured. Permeability of this soil is rapid and available water capacity is low. Runoff is medium, and the hazard of soil erosion is moderate. This soil type is used for timber production and urban development.

BeD – Beausite gravelly sandy loam, 15-30 percent slopes. This soil is moderately well to well drained on gently rolling to very steep slopes. The gravelly sandy loams are approximately 20-40 inches deep over sandstone. Roots penetrate easily to the depth of bedrock and will extend in to bedrock where fractured. Runoff is rapid, and the hazard of soil erosion is severe. This soil type is primarily used for timber production.

Figure 2-1. Soils Types.



2.4 Topography

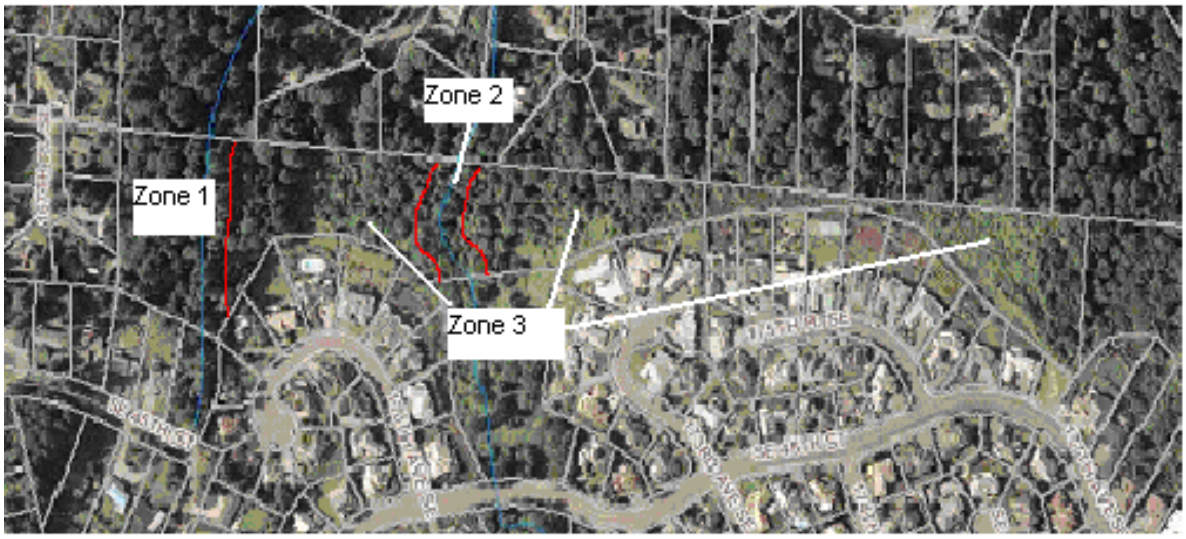
Topography of the NGPA parcels is moderately concave with the steepest slopes immediately adjacent to the home sites. The upper slopes on Tract 2A and the eastern half of Tract 1A generally range from 30 to 50 percent, and the western and lower slopes range from 10 to 30 percent. See topographic site map in the Appendix.

2.5 Vegetation

The Vuemont Vista area is within the Puget Sound trough of the western hemlock plant community zone (Franklin and Dyrness 1988). The naturally occurring vegetation in an undisturbed area would consist of an overstory tree canopy of Douglas-fir and western hemlock with western red cedar present on moist soils and along stream courses. Bigleaf maple and red alder may be present on sites that have been disturbed by forest management practices in the early 1900's as pure stands, or mixed with conifer species. The understory plant community of this forest zone will vary depending on the soil composition, permeability, density, and percent organic composition. The natural understory composition of the Vuemont Vista site would consist of sword fern and Oregon grape with salmon berry present in disturbed sites and along stream courses.

Existing vegetation in the areas surrounding the riparian corridors (see Zone1 and Zone 2 below) consists of an overstory of mid-successional mixed stand of Douglas fir and bigleaf maple. The red lines demarcate the 50-foot setback for the Type A streams. Overstory trees range from 8 inches in diameter up to approximately 16 inches in diameter. The understory vegetation in these zones is dominated by sword fern with a minor composition of Indian plum, and salmon berry, with maidenhair fern present near the stream. The plant association classification (climax plant community) for this site would be western hemlock / sword fern.

The areas identified as Zone 3 in the figure below are dominated by early successional species. The overstory bigleaf maple trees have been removed (identified from stump sprouting) by cutting, allowing for increased shrub production and the opportunity for establishment of early successional and invasive species. Existing vegetation within this zone includes bigleaf maple stump sprouts (seedling to sapling size), sword fern, Indian plum, stinging nettle, and Himalayan blackberry. Portions of this tract that were disturbed most recently have a low percent composition of the invasive Himalayan blackberry, while areas cleared more than two years ago contain a high percent composition of this invasive species.



2.6 WILDLIFE

A variety of wildlife utilizes the NGPA tracts and the associated riparian corridors within them. Wildlife most commonly seen on the site includes deer, rabbits, squirrels, rats, moles, coyotes, snakes, raccoons, and a variety of birds (starlings, flickers, Stellar's Jays, etc.).

3 MANAGEMENT PLAN GOALS

3.1 Vuemont Vista Goals

The long-term objective for managing the NGPA within the Vuemont Vista subdivision is to maintain scenic views of the Cascade Mountains, Lake Sammamish, and downtown Bellevue for the residents of the subdivision as prescribed by the declaration of conditions for the subdivision, while managing the vegetation to provide native growth and the protection of soil resources. Underlying this objective is the homeowners' desire to maintain the quality of their living environment and to protect investments made by property owners who purchased Vuemont parcels in reliance on the view rights established in the CCRs and reinforced by the Vuemont Vista plat language.

Management of the tracts has been inconsistent. The Vuemont Homeowners' Association is made up of volunteers and turnover is high, such that the individual responsible for identifying view-blocking trees and arranging for their removal will normally carry out the process once before retiring from the role. As a result, maintenance of vegetation for the preservation of views has been directed at spot treatments without a long-term strategy. This approach has also placed an emphasis on the short-term maintenance of views to a detriment to the natural vegetation and slope stability. The goal of this management plan is to identify an approach for maintaining the view rights of home owners that would not be detrimental to the native vegetation community and soil resources. This plan will identify vegetation treatments that can be used within the NGPA to maintain a native vegetation plant community and identify treatments to restore areas of invasive species to native plant communities. These treatments will also provide long-term protection and stabilization of soil resources, as well as provide habitat for wildlife and aquatic species.

3.2 City of Bellevue Goals

The City of Bellevue desires to maintain the protection of critical resources on this site while allowing the Vuemont Homeowners' Association to conduct vegetation management treatments for the purpose of maintaining protected view rights in accordance with the plat language for Vuemont Vista Divisions 1 and 2.

The City of Bellevue Land Use Code restricts activity within protected areas. The Code states, "no development, use, land alteration or activity may occur in a Protected Area or a primary setback except as specifically allowed by this Part 20.25H; provided…. Supplemental planting is permitted."

The protection of stream environments helps preserve natural storm runoff rates and infiltration and controls erosion and siltation into streams to maintain water quality. The protection of steep slopes helps maintain slope stability, erosion, and the economic value of down slope landowners. Preserving vegetation in its natural state provides habitat and food sources for wildlife, while also providing aesthetic values for people.

3.3 Regulatory Requirements

Native Growth Protection Area. The plat maps for Vuemont Vista Division 1 and Division 2 designate Tracts 1A and 2A as Native Growth Protection easements. Although the City of Bellevue Land Use Code prohibits tree removal within Native Growth Protection areas due to the presence of protected areas, the plats for both divisions contain language allowing for selective tree cutting. The final plat for Division 1 allows for "selected tree cutting as permitted in the Declaration of Conditions, Covenants and Restrictions," and the final plat for Division 2 allows for "selected tree cutting and removal of dangerous or diseased trees."

Sensitive Areas. The Bellevue Land Use Code (Bellevue City Code Title 20) establishes special standards and procedures that apply to development on any site which is in whole or in part mapped or defined as a sensitive area in the City of Bellevue Sensitive Area Notebook. Vuemont Vista Divisions 1 and 2 were annexed into the City of Bellevue after the Sensitive Areas Notebook was developed in 1987.

The following Protected Areas have been identified within Tracts 1A and 2A as described in Section 2.2 of this management plan:

- Slopes equal to or exceeding 40 percent in grade together with a 50-foot top of bank primary setback
- Areas of colluvial or landslide deposit on slopes of 15 percent or more in grade together with a 75-foot toe of slope setback
- Type A streams together with a 50-foot primary setback from the top of bank

Wildlife Habitat. Protecting wildlife habitat within the NGPA is important, based on Bellevue City Code. Short and long term management prescriptions and plans, including characterization of trees and vegetation to be removed, and restoration and revegetation plans with native species, including native species with a lower growth habit, shall demonstrate that the proposed Vegetation Management Plan will not significantly alter the forest and habitat characteristics of a site or significantly impact critical area functions of the site over time. In the event that the City desires specific trees and habitat areas be protected based on the needs of particular species of wildlife, the City shall notify Vuemont and the parties shall discuss and jointly develop an appropriate implementation plan which shall form the basis of an amendment to this Plan..

Clearing and Grading. Vegetation management activities within the NGPA must be conducted under permit. The City of Bellevue Clearing and Grading Code (BCC 23.76)

requires that a Clearing and Grading permit be obtained for any clearing within a protected area. The definition of Clearing is the act of destroying or removing vegetation by any means, including chemical, mechanical, or by hand (COB 23.76.015). Furthermore, the City's Environmental Procedures Code (BCC 22.02) designates Type A riparian corridors (including the 50-foot top of bank setback) and slopes over 40 percent in grade as critical areas. Any clearing or grading work within critical areas is required to go through State Environmental Policy Act (SEPA) review to assess impacts to the environment and determine their significance.

In order to assess the cumulative impacts of the proposed long-term management strategies under this plan, SEPA review on the management plan will be required. It is suggested that the Homeowners Association apply for a Preliminary SEPA review application to provide for a one-time SEPA review of the plan. This will allow for subsequent Clearing and Grading permit review and approval without SEPA review on each individual permit.

Prior to approval of any Clearing and Grading permit for future management activity within the tracts, the Vuemont Vista Homeowners Association must identify and stake the top of bank of the two Type A streams as well as the 50-foot primary setback from the top of bank location. This staking must be observed and/or inspected by City of Bellevue Land Use staff prior to approval of any future clearing and grading permit.

3.4 Desired Future Conditions

A desired future condition statement provides a description of the types and composition of vegetation present in the NGPA at designated time periods that would meet the view protection goals of the Vuemont homeowners while protecting Sensitive Areas identified by the City of Bellevue. The desired future condition is also constrained by the natural plant community capability of the site and the funding available from the homeowners association to conduct treatments.

Outside of the riparian corridor in Zones 1 (see Appendix A – "Significant Tree Inventory and Zone Management Map"), the desired future condition of the Vuemont Vista NGPA would include a mix of conifer and deciduous trees species in the overstory. This would provide a natural tree cover element on the site, shade to the streams, and provide cooler temperature, lower light intensity, and maintain soil moisture levels in the understory. A mixture of reduced tree sizes (diameters and heights) and planned spacing will provide views to the desired view elements of the Cascade Mountains, Lake Sammamish, and downtown Bellevue. A balance between protecting valuable environmental functions within the tract and maintaining views to meet the desires of the Vuemont Homeowners Association must be provided. This can be achieved through the establishment of view corridors within the tracts. Over the long-term the overstory species composition would be converted from early successional species (Douglas-fir, bigleaf maple, red alder) to later successional species (western hemlock and western red cedar) that are slower growing and have the ability to reproduce and grow in shaded conditions. The understory shrub species composition would be dominant to sword fern,

red huckleberry, and Oregon grape. Understory herb composition would be representative of the Douglas-fir / sword fern plant association.

At the lower-slope levels within Zones 3A and B approximately below the 570 ft mark (Lower Zone 3) and Zone 3C (see Appendix A – "Significant Tree Inventory and Zone Management Map"), a plant community comprising native tree species that have shorter heights at maturity (bitter cherry and vine maple) or maintain slower rates of height growth (western red cedar) would be present. A mixture of evergreen species and deciduous species would provide conditions for native understory shrub species that are shade tolerant, and restrict the establishment and development of early successional or invasive species that are generally intolerant of shaded conditions. Understory shrub species would be dominated by evergreen shrub and fern species. These evergreen species are usually low growing and therefore taller deciduous shrub species would be present at a mid canopy level. Understory herbaceous species composition would be similar to what would be present on the lower slope, but would include a greater composition of species that are tolerant of higher light levels and drier soil moisture conditions as a result of fewer evergreen trees in the overstory.

In Zones 3A and B above the 570 foot mark (Upper Zone 3) and Zone 3C (see Appendix A – "Significant Tree Inventory and Zone Management Map"), the vegetation composition would consist of native shrub species. Since there would be no overstory tree canopy to protect this portion of the site from high sun intensities and drier soil moisture levels (although the north facing slope reduced this effect some) the species would be shade intolerant and adapted to lower soil moisture conditions during the summer. The shrub layer would include a high concentration of evergreen shrub species to limit site conditions favorable to the establishment and development of invasive species. Understory herb species composition would be similar to what would be present on the mid-slope but would include a greater composition of species that are tolerant of higher light levels and drier soil moisture conditions.

4 TREATMENT OPTIONS – "TOOLBOX"

In order to achieve the desired future conditions described above, the following treatment options represent the range of short-term and long-term treatments available for the site. These treatment options are organized as "tools" that can be used to address the major issues of the site for transitioning from the existing conditions to the desired future conditions. There are four primary issues addressed; control of invasive blackberry, control of bigleaf maple sprouting, management of view-blocking trees, and establishment of native vegetation for visual and soil protection goals. The following section identifies each tool, zones it is to be used in, required permits, and required actions necessary in order to achieve an approvable permit. See Appendix A – "Significant Tree Inventory and Zone Management Map" for the associated map, showing the Significant Tree Inventory, Zones, and Management Tools that are proposed for use within those zones.

Issue: Presence and continued invasion of non-native blackberry

The management of invasive species for a site involves three fundamental objectives: prevention, eradication, and control. The treatment options described below are for the purposes of eradicating and providing long-term control of non-native blackberry at the site. These treatments in combination with treatments identified for establishment of native vegetation on the site would work together in preventing further invasion of this species. While the optimal scenario for non-native blackberry control would result in complete eradication of blackberry plants throughout the site, this outcome would be very difficult to achieve under this Management Plan, based upon estimated costs and required treatments. This plan focuses primarily on the long-term control of non-native blackberry within the three management units identified within Zone 3. Efforts will focus upon eradication of the non-native blackberry within the management units.

There are five general methods for controlling invasive weeds: physical, managerial, biological, chemical, and prescribed burning. Depending on the weed to be controlled, site conditions, and available funding; one or a combination of these methods may be the most effective approach to controlling the target species. Physical control includes both manual and mechanical means. Managerial control includes prescribed grazing. Biological control includes the introduction of insects or pathogens, which are selective for a particular species. Chemical control includes the application of herbicides in either a broadcast or spot application. Prescribed burning includes either broadcast or spot burn treatments. Of these five general methods, two have been selected for use at this site – physical and chemical.

Information regarding the treatment of invasive blackberry species is available at the King County Department of Natural Resources and Parks Noxious Weed Control Program (website: http://dnr.metrokc.gov/weeds) and the Nature Conservancy Invasive Species Initiative (website: http://tncweeds.ucdavis.edu).

Tool #1: Blackberry Eradication (removal) Treatments

Applicable Zones: 3A (upper and lower), 3B (upper and lower), and 3C

Permits Required: Clearing & Grading in Protected Areas (GH)

The required SEPA review required for a GH permit will be completed under a "Preliminary SEPA" to be conducted on this Management Plan as a whole.

Treatment Types: Physical Control, Chemical Control

1. Physical Control. Cutting and grubbing of re-sprouting plants through use of mechanical control (use of weed whackers with brush cutting blades) and manual control (use of machetes)

2. Chemical Control. Roundup or similar chemical treatment to kill canes. Spot application of herbicides to blackberry plants that re-sprout from existing live root stock, or to young plants developing from seed.

Required Actions: Create a site plan identifying where tool will be implemented. Clearly identify boundaries of all Zones.

Follow-up: Blackberry eradication will require establishment of native vegetation to prevent reestablishment of blackberry after treatment. See Tool #5 for process.

Issue: Re-sprouting of bigleaf maple stumps.

Bigleaf maple stump sprouts can reach heights of 15 feet and produce a crown spread of 20 feet within three years (USDA Forest Service 1990). The number of sprouts on a stump is dependent on the stump size, but may be up to 60 sprouts per stump. Effective control of bigleaf maple stumps sprouts all zones is necessary in order to provide scenic view lines within the identified view corridors for adjacent homeowners.

Tool #2: Maple Stump Sprout Eradication (removal) Treatments

Applicable Zones: 3A (upper and lower), 3B (upper and lower), and 3C

Permits Required: Clearing & Grading in Protected Areas (GH)

The required SEPA review required for a GH permit will be completed under a "Preliminary SEPA" to be conducted on this Management Plan as a whole.

Treatment Types: Physical Control, Chemical Control

1. Physical Control. Physical control of bigleaf maple stump sprouts requires persistent cutting of sprouts at regular intervals during the growing season to deplete stored food reserves in the root system.

2. Chemical Control. Stump sprouts can be prevented with the application of herbicides on freshly cut stumps.

Required Actions: Create a site plan identifying where tool will be implemented. Clearly identify boundaries of all Zones.

Follow-up: Once initial control of stump sprouting is completed, subsequent control treatments would not be necessary unless bigleaf maple seedlings become established from adjacent seed sources. Establishing an evergreen shrub canopy will prevent maple seedling establishment. See Tool #5.

Issue: Tall overstory view-blocking trees

The existing tall conifer trees, including those within the riparian areas, will continue to gain approximately 2 feet of height growth each year. In addition to height growth, crown spread (e.g., the length growth of lateral branches) will occur that may also inhibit scenic views. Two options are identified that can assist in meeting the view objectives of the homeowners association through either short-term or long-term treatments – pruning and uneven-aged stand management. It should be noted that the topping of trees is not

recommended for the health of the tree and safety of adjacent landowners; as such, no topping of trees will be permitted under this management plan.

Tool #3: Conifer Pruning: Inter-limbing and Windowing

Applicable Zones: 1B and 2 (primary zones); for use in all other zones as needed

Permits Required: Clearing & Grading in Protected Areas (GH)

The required SEPA review required for a GH permit will be completed under a "Preliminary SEPA" to be conducted on this Management Plan as a whole.

Treatment Types: Inter-limbing and Windowing

1. Inter-limbing. Pruning method used to increase the visual sight line past individual large trees. Removal of approximately one-third to one-half of the lateral branches evenly distributed throughout the crown.

2. Windowing. Pruning method used to allow a view "window" through the existing foliage of the tree's canopy. Prune and/or remove major limbs and branch whorls in sections that are obscuring a view.

Required Actions: Use the "Significant Tree Inventory and Zone Management Map" site map attached to this plan (Appendix A) as the underlying base map and create a new site plan. Clearly identify boundaries of all Zones. Identify trees that are to be inter-limbed or windowed and identify each tree by species, size (dbh), and location. Show any trees that have been inter-limbed or windowed under any previous permit submittals.

Tool #4: Uneven-aged stand management.

Applicable Zones: 1A, 3A (upper), 3B and 3C. On the whole, Tool #4 is not to be used in the riparian zones of Zone 1B and 2. However, selective application may be approved in a case-by-case basis.

Permits Required: Clearing & Grading in Protected Areas (GH)

The required SEPA review required for a GH permit will be completed under a "Preliminary SEPA" to be conducted on this Management Plan as a whole.

Treatment Type: Uneven-aged Stand Management

This approach over the long-term can reduce the height of the stands and maintain a lower average canopy height that is more desirable for scenic views. Remove the tallest overstory trees and replant replacement trees in the understory.

Required Actions:

Use the "Significant Tree Inventory and Zone Management Map" site plan (Appendix A) as the underlying base map and create a new site plan and identify each tree by species,

size (dbh), and location. Show any significant trees that have been removed or replanted under any previous permit submittals. Clearly identify boundaries of all Zones. Identify trees that are to be removed, limited to a maximum of 15% of the number of trees identified on the "Significant Tree Inventory and Zone Management Map" site plan (Appendix A) per zone. It should be noted that the 15% total is based upon the total number of trees identified *within each specific zone* and should be calculated for each zone separately, rather than as 15% of the total trees for the entire NGPA. Show the locations for 3 (three) replacement trees that will be replanted for each tree that is proposed for removal, if the replacement tree sizes are 4'-6' in height (evergreen) or 1"-2" minimum caliper (deciduous). Show the locations for 4 (four) replacement trees that will be replanted for each tree that is proposed for removal, if the replacement tree sizes are 18"-36" in height (evergreen) or 1/2" minimum caliper (deciduous). Height of 18-36 inches (evergreen) or ½" minimum caliper (deciduous) is acceptable if a 60% survival rate is maintained. Undersized plants with a fatality rate of more than 40% after two seasons will be replaced with like species meeting the minimum size requirements described in the table on page 15. Replacement trees are to be selected from the approved native vegetation list applicable to the Zone, as described under Tool #5. Use of this Tool #4 in any one Zone is limited to once every three years.

Issue: Establishing Native Vegetation

The establishment of appropriate native plant species to achieve long-term management goals will provide habitat for wildlife species that use the site and will result in the lowest cost approach over the long-term for maintaining the site for visual and soil protection goals. The following species are recommended to create a plant community at different levels of the slope to meet the long-term objectives. Some of these species are currently present on the site. The lists provided in the next section highlight select recommendations, but should not be construed to be all-inclusive. It remains at the City's discretion to substitute appropriate native plants when necessary to achieve optimal site conditions, within the parameters of the management plan objectives. Evergreen species would be selected over deciduous species in order to maintain year-round shade at the soil level and prevent establishment of invasive species, which are generally not tolerant of shaded conditions. The density of the species occupying the upper-slope area should be sufficient to establish full occupancy of the site and prevent the re-establishment of invasive weeds. The establishment of shade tolerant conifers in the understory of the lower slope will provide replacement trees in future years when overstory trees are removed to achieve visual goals.

Tool #5: Native Vegetation Establishment

Applicable Zones: All

Permits Required: Clearing & Grading in Protected Areas (GH)

The required SEPA review required for a GH permit will be completed under a "Preliminary SEPA" to be conducted on this Management Plan as a whole.

Treatment Type: Native Vegetation Establishment

The planting of native vegetation is to be conducted following the initial treatment to control invasive blackberries (Tool #1) and bigleaf maple sprouting (Tool #2), and in connection with uneven-aged stand management (Tool #4).

Planting density will be dependent on the individual species purchased for the specific Zone, and also on the density of existing healthy plants of the preferred species.

Required Actions: After Tool #1 and/or Tool #2 have been implemented in a specific Zone or when Tool #4 is proposed for a zone, use the site plan created for use with that tool as the underlying base map and create a new site plan. Clearly identify boundaries of all Zones. Identify location, species, spacing, and size for all native vegetation to be planted. Select and plant native vegetation appropriate for each Zone, based on the planting list approved for that Zone.

Native vegetation establishment proposals must reasonably adhere to the following general guidelines:

Vegetation Type	**Minimum Size***	**Planting Spacing**
Trees – Evergreen	4' – 6' in height	10' – 15' on center from other trees
Trees - Deciduous	1" – 2" minimum caliper	10' – 15' on center from other trees
Shrubs	1-gallon pots	3' – 5' on center from other shrubs

* Height of 18-36 inches (evergreen) or ½" minimum caliper (deciduous) is acceptable if a 60% survival rate is maintained. Undersized plants with a fatality rate of more than 40% after two seasons will be replaced with like species meeting the minimum size requirements above.

Plant Lists:

All the species listed in the following sections are native to western Washington and the Puget Sound geographic zone. They should survive the seasonal wet and dry periods throughout the year without any maintenance actions once they are established. Planting some of these species in the spring may require supplemental watering during the first summer to ensure survival during low soil moisture conditions. Root systems for these species would be fully developed and not require supplemental watering after one year. Using container plants, or planting these species in the fall, would allow the development of a better rooting system prior to the first summer dry period and assist with their survival without supplemental watering.

Zone 3 (Upper)

The long-term objective for the areas in Upper Zone 3 (above approximately 570 feet elevation – *see* Appendix) is to establish and maintain low growing evergreen shrub species that would not restrict visual sight lines, would provide soil stability, and would restrict the ability of invasive species to become established and colonize the site. Native

species that would be desirable for the site are listed below. If these species currently exist on the site they should be protected during treatment to control invasive blackberry if possible. If these species are not currently on the site they could be established by planting container or bare-root stock. Oregon grape and salal produce extensive rooting systems and sprout new plants via rhizomes and therefore provide good stability of the upper soil layers and a dense shrub canopy layer. The evergreen shrubs listed below are understory plants and will not survive without canopy to provide shade. Due to the exposed nature of this slope, each planting proposal should demonstrate that the number of medium height deciduous shrubs is adequate to establish or maintain a shady canopy layer under which the evergreen shrubs can be planted such that they will survive and to shade out invasives such as Himalayan blackberry.

Plant List: Upper Zone 3

Common Name	Species	Vegetative Characteristics
Oregon grape	*Berberis nervosa*	Low growing evergreen shrub.
Salal	*Gaultheria shallon*	Low growing evergreen shrub.
Evergreen huckleberry	*Vaccinium ovatum*	Low growing evergreen shrub.
Indian plum	*Oemleria cerasiformis*	Medium height deciduous shrub.
Oceanspray	*Holodiscus discolor*	Medium height deciduous shrub.
Hazelnut	*Corylus cornuta*	Medium height deciduous shrub.

Zone 3 (Lower) and Zone 1A

The long-term objective of the lower slope areas of Zone 3 (below 570 feet elevation) is to establish a moderate height shrub and tree community that includes a high amount of evergreen shrubs that would restrict the establishment of invasive species, while providing a taller and more diverse plant community (compared to the upper slope area) that does not overly restrict visual sight lines within the designated view corridors. The species listed below would be acceptable or planting or maintaining in this area. In addition, any species listed for the upper slope area could also be included in the plant community established in these zones.

Plant List: Lower Zone 3 and Zone 1A

Common Name	Species	Vegetative Characteristics
Snowbrush	*Ceanothus velutinus*	Medium height evergreen shrub.
Pacific rhododendron	*Rhododendron macrophylum*	Medium height evergreen shrub.
Fool's huckleberry	*Menziesia ferruginea*	Medium height deciduous shrub.
Vine maple	*Acer cininatum*	Tall deciduous shrub.
Sitka alder	*Alnus sinuata*	Tall deciduous shrub.
Red elderberry	*Sambucus racemosa*	Tall deciduous shrub.
Indian plum	*Oemleria cerasiformis*	Medium height deciduous shrub.
Bitter cherry	*Prunus emarginata*	Medium height deciduous tree.
Shore pine	*Pinus contorta*	Medium height evergreen tree.

Scouler's willow	*Salix scouleriana*	Medium height deciduous tree appropriate for planting along stream.
Western red cedar	*Thuja plicata*	Shade tolerant evergreen conifer tree.
Western hemlock	*Tsuga heterophylla*	Shade tolerant evergreen conifer tree.
Pacific dogwood	*Cornus nuttallii*	Medium to large deciduous tree.

Zones 1B and 2 (Stream Environments)

The long-term objective for the sensitive areas within Zones 1B and 2 is to maintain a mixed conifer and deciduous forest. The overstory tree composition is expected to transition over time from its existing condition to include late successional species that would initially grow underneath the existing overstory canopy. Successful reproduction of these shade tolerant species would allow for continued development and maintenance of a forest canopy, while also allowing for the selective removal and/or inter-limbing of taller trees on a case-by-case basis. The species listed below would be acceptable for planting or maintaining in this area. In addition, any species listed for Zone 3 lower-slope and upper slope areas could also be include in the plant community established in the lower slope zone.

Plant List: Zones 1B and 2 (Stream Environments)

Common Name	Species	Vegetative Characteristics
Western red cedar	*Thuja plicata*	Shade tolerant evergreen conifer tree.
Western hemlock	*Tsuga heterophylla*	Shade tolerant evergreen conifer tree.
Pacific dogwood	*Cornus nuttallii*	Medium to large deciduous tree.

5 IMPLEMENTATION

The following table summarizes the treatment options, or tools, to be applied to each management zone.

Tool / Zone	1 Blackberry Eradication	2 Maple Stump Control	3 Inter-limbing & Windowing	4 Uneven-aged Stand Management	5 Vegetation Establishment
1A			**X**	**X**	**X**
1B*			**X**		**X**
2*			**X**		**X**
3A	**X**	**X**	**X**	**X**	**X**
3B	**X**	**X**	**X**	**X**	**X**
3C	**X**	**X**	**X**	**X**	**X**

*Zones 1B and 2 comprise stream corridors and 50-foot setbacks from top-of-bank

Treatment Schedule

The table below provides a sample schedule for conducting treatments on the management zones. This example is provided as a guideline for timing of treatments in relation to each other and not as a specified schedule. The timing of actual treatments will be driven by perceived need and budgetary considerations. Constraints on schedule flexibility include i) the three-year waiting period between Tool #4 treatments in any given zone and ii) the requirement that Tool #5 treatments follow any removal of vegetation. Also, all plantings should take place during the dormant season in order to increase survivability.

Prop #	Zones	Tools	Proposal Description	Time Period
1	3A-C	1,2,5	Physical & chemical treatment of invasive blackberry and maple stump sprouts. Establish native species after treatments.	Year 1
2	3A	4,5	Remove 15% overstory from Zone 3A. Plant replacement trees.	Year 2
3	3B	4,5	Remove 15% overstory from Zone 3B. Plant replacement trees.	Year 3
4	1A	4,5	Remove 15% overstory from Zone 1A. Plant replacement trees.	Year 4
5	2	3	Inter-limb/window Zone 2	Year 2
6	1B	3	Inter-limb/window Zone 1B	Year 5
7	3A	4,5	Remove 15% overstory from Zone 3A. Plant replacement trees.	Year 5
8	3B	4,5	Remove 15% overstory from Zone 3B. Plant replacement trees.	Year 6
9	1A	4,5	Remove 15% overstory from Zone 1A. Plant replacement trees.	Year 7

Monitoring and Compliance

Prior to issuance or approval of any permits, City staff will need to conduct a site inspection to confirm that there are surviving trees and vegetation from the most recently permitted planting cycle. Replacement trees will be required as necessary in order to achieve an acceptable level of survivorship. After reviewing the on the ground results of the planting cycles, based upon the tree replacement survival rates, the City will have the option to change the tree replacement ratio in order to sufficiently meet the needs of the site. Additionally, every five years the City of Bellevue will reevaluate the success of the project and the underlying principles of the Vegetation Management Plan. If necessary, adjustments may be made in order to best achieve the goals of the plan.

6. REFERENCES

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7. APPENDIX

TOPOGRAPHIC SITE MAP

SIGNIFICANT TREE INVENTORY AND ZONE MANAGEMENT MAP (TRACTS 1A AND 2A)

SIGNIFICANT TREE INVENTORY DATA TABLE

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ADDENDUM REPORT

TO

VEGETATION MANAGEMENT PLAN

Vuemont Vista

Native Growth Protection Area

JUNE 2015

Prepared by:

Bob Layton
Senior Arborist/Forester

APPENDIX

I.INTRODUCTION

American Forest Management, Inc. was contacted by Ms. Katie Teplicky of the Vuemont Homeowners Association (HOA) in March of 2015 and was asked to conduct a review of the current Vegetation Management Plan for the Vuemont Vista Native Growth Protection Area.

The original Vegetation Management Plan was written in April of 2006. The purpose of this review is to evaluate past practices and determine if the desired future conditions as outlined in the plan are being met. The ultimate goal is to maintain scenic views while managing the vegetation to provide native growth and the protection of soil resources.

The focus of this review is on Zone 3 where the majority of management has occurred. There has been little activity in Zones 1 and 2. The conditions in Zones 1 and 2 remain relatively unchanged. Conditions remain healthy and stable and consistent with the original plan.

In order to fully evaluate the effectiveness of the plan and past practices, a significant tree inventory was conducted as part of the review. A significant tree is defined as a tree greater than 6" DBH (diameter at breast height, 4 ½' above ground).

As part of the assignment, a new Zone or area (Zone 4) was established. Zone 4 encompasses the vacant HOA parcel (King County Parcel #8965501010) that exists between SE 45th Street and the end of the cul-de-sac of 171st Avenue SE.

II.EXISTING SITE CONDITIONS/OBSERVATIONS

A. Lower Zone 3

Lower Zone 3 includes the lower slopes of Zones 3A, 3B and 3C.

Species composition is comprised of a mix of native coniferous and deciduous species, including Douglas-fir, western red cedar, western hemlock, big leaf maple, red alder, bitter cherry and black cottonwood. Tree ages range from young (less than 10 years) to mature (90 years +).

Many of the evergreen or coniferous trees have been window pruned and/or interlimbed in the recent past. This practice does not appear to have had a negative impact on tree health or longevity. Many of the big leaf maple have been topped. Topping cuts are very old and occurred prior to the induction of the vegetation management plan. Significant trees appear healthy. No indicators of disease or major insect infestations were observed. No high-risk tree conditions were identified.

Understory vegetation is primarily native. Common species include Indian plum, vine maple, stinging nettles, Oregon grape, swordfern, salmonberry, and creeping blackberry. Invasive cover is minor and includes mainly small isolated patches of Himalayan blackberry.

Lower Zone 3C has a dense population of naturally regenerating non-significant trees. These are primarily comprised of bitter cherry and big leaf maple. Lower Zones 3A and 3B have minor numbers of naturally regenerating non-significant trees, primarily big leaf maple.

B. Upper Zone 3

Upper Zone 3 includes the upper slopes of Zones 3A, 3B and 3C.

The upper slopes of Zone 3 contain very sparse tree cover. This area has received the majority of management over the past several years. Past tree removals have been mitigated by the removal of invasive Himalayan blackberry and the planting of native shrubs. Shrubs planted in the zone include primarily snowberry, tall Oregon grape, vine maple and native rose species.

The spread of planted shrubs is inhibited by native and non-native grasses in many areas. The snowberry has been the most successful at establishment and spreading. The prevalence of evergreen shrubs continues to be limited. The tall Oregon grape has become well established, but spreading is limited.

C. Zone 4

Zone 4 is summarized as native deciduous forest. Tree species composition is primarily red alder with a moderate component of big leaf maple and black cottonwood. Scouler willow is present in minor numbers at the south end. Scattered small groupings of western red cedar exist along the west perimeter. A total of 195 significant trees were inventoried in Zone 4.

Much of the subject area has been disturbed in the past by the installation of utilities. This is evident by the dense growth of red alder trees along the eastern perimeter of the parcel. The majority of this alder is in premature decline which is common on disturbed sites.

Understory native vegetation is predominantly comprised of salmonberry, vine maple and Indian plum. Other minor species noted include trillium, Oregon grape, sword fern and bleeding heart.

Invasive species are prevalent in the south end, comprised of Himalayan blackberry and English ivy. The presence of invasive species is only minor in the middle portions and north end.

The subject area is wet. A stream meanders through the middle of the parcel with small associated wetland areas.

III.SIGNIFICANT TREE INVENTORY

As part of this review and update, all areas were re-inventoried for significant trees. Significant trees were identified in the field with a numbered aluminum tag attached to the lower trunk. Tree summary tables can be found in the appendix. Tree tag numbers correspond with the tree summary tables and the tree locator maps (appendix). Tree Locator Maps are provided to aid in locating trees. Not all trees are numbered on the maps but they can be used as guide to locate specific trees.

Inventory Methodology

Each tree in this report was visited. Tree diameters or DBH (diameter at breast height, 4 ½' above ground), were measured by tape. Total tree heights and crown spread were estimated in feet. Each tree was visually examined for defects and vigor. The tree assessment procedure involves the examination of many factors:

- The crown of the tree is examined for current vigor. This is comprised of inspecting the crown (foliage, buds and branches) for color, density, form, and annual shoot growth, limb dieback and disease. The percentage of live crown is estimated for coniferous species only and scored appropriately.

- The bole or main stem of the tree is inspected for decay, which includes cavities, wounds, fruiting bodies of decay (conks or mushrooms), seams, insects, bleeding, callus development, broken or dead tops, structural defects and unnatural leans. Structural defects include crooks, forks with V-shaped crotches, multiple attachments, and excessive sweep.

- The root collar and roots are inspected for the presence of decay, insects and/or damage, as well as if they have been injured, undermined or exposed, or original grade has been altered.

Based on these factors a determination of viability is made. Trees considered 'non-viable' are trees that are in poor condition due to disease, extensive decay and/or cumulative structural defects, which exacerbate failure potential. A 'viable' tree is a tree found to be in good health, in a sound condition with minimal defects and is suitable for its location. Also, it will be wind firm if isolated or left as part of a grouping or grove of trees. A 'borderline' tree is a tree where its viability is in question. These are trees that are beginning to display symptoms of decline due to age, species related problems and/or man caused problems. Borderline trees are not expected to positively contribute to the landscape for a period of +/- 10 years.

Inventory Findings

The previous inventory was lacking in accuracy. Using the provided significant tree inventory and maps, it was very difficult to decipher the location of trees. We used the tables and maps as a guide to identify trees with a numbered aluminum tag. Where possible, the previous numbers were used. In some areas, there were many more significant trees than what was shown on the map. In addition, several trees have grown up to a significant size since the last tree inventory in 2006.

The vast majority of trees are in fair to good condition. No evidence of serious decline or disease issues was observed. Trees have developed typical defects consistent with species profiles. Many of the pioneer species are in natural decline, specifically the bitter cherry and red alder. These pioneer species are in natural decline due to age.

The significant tree inventory is summarized as follows: Total Trees

ZONE	BM	RA	CH	CW	CA	SW	DF	WH	RC	TOTAL
2	14	1					3	2		20
3A	14	3					17		2	36
*3A										65
3B	28	29	2		1		9	23	1	93
3C	20	2	4				9		17	52
4	33	122	2	16		4	2	1	15	195
Total										461

*3A = PORTION OF ZONE 3A NOT INVENTORIED, ORIGINAL DATA USED

BM = big leaf maple RA = red alder CH = bitter cherry
CW = black cottonwood CA = cascara SW = scouler willow
DF = Douglas-fir WH = western hemlock RC = western red cedar

Detailed information for each tree can be found in Appendix C – Tree Summary Tables

IV.DESIRED FUTURE CONDITION EXPECTATIONS

Lower Zone 3

The goals and objectives set out in the original plan are being met for the Lower Zone 3 and Zones 1 and 2. These goals and objectives include protecting stream environments, maintaining slope stability, maintaining a diverse variety of native tree and shrub species, and creating an un-even aged stand structure. Conditions in Zone 1 remain relatively unchanged. This area has not been managed. Conditions in Zone 2 and Lower Zone 3 remain stable and healthy.

Upper Zone 3

Upper Zone 3 is fully vegetated. The desired future condition of having a high percentage or concentration of evergreen shrub species has not been fully met. Upper slopes are primarily in deciduous shrubs and grasses, both native and non-native. There is also a fairly high concentration of thistles. The desired future condition continues to be constrained by the funding available from the homeowners association to conduct invasive species and grasses treatments.

Himalayan blackberry continues to have a moderate presence on the upper slope. The spread is being contained by the tree edge at the mid slope and patches of native vegetation on the lower slope. The invasive butterfly bush is also common.

Recommendations

Continue to use all five tools as outlined in the original plan. These have been effective in protecting resources and meeting objectives. Tool #5 (Native Vegetation Establishment) shall be conducted simultaneously with Tools #1 (Blackberry Eradication) and Tool #2 (Maple Sprout Control). In addition, grasses in the area to be planted shall be treated with an herbicide (Roundup or similar chemical) to encourage the successful establishment and spread of the planted native shrub species.

To continue working toward the desired future condition, a wider variety of native shrubs shall be planted in the future. 75% of plantings shall be evergreen species. On Upper Zone 3, salal and kinnikinnick are highly recommended due to their habitat and growth characteristics and their ability to spread and cover large areas. These will do well in full sun or shade. Swordfern is not establishing well on upper zone 3, future plantings are not recommended.

It appears the majority of plantings have been concentrated on Upper Zone 3. Per the original plan, replacement plantings are required in the Lower Zone when tree removals are carried out. This is critical to establishing a multi-layered dense canopy. A revised plant list is included in the appendix. An even mix of these species is recommended to eventually reach the desired future condition.

Tree Risk Assessments

While conducting the significant tree inventory, several moderate to high-risk tree conditions were identified in new Zone 4. All are concentrated at the south end of the parcel. There are many young to semi-mature black cottonwood trees on the east perimeter that will become problematic as they mature and grow to very large sizes.

No high-risk conditions were observed in Zone 3. Zone 1 was not inventoried but may contain some high-risk conditions due to the proximity of homes to subject trees.

In order to maintain risks at acceptable levels, Zones 1 and 4 shall be periodically evaluated by a Qualified Tree Risk Assessor. Taking a proactive approach will ultimately reduce the costs and risks associated with future tree failures.

The Zone 4 high risk tree issues are currently being evaluated and will be abated in the near future. A follow-up risk assessment is warranted in three to five years or sooner if obvious symptoms of decline present themselves.

A risk assessment of Zone 1 is recommended in the near future. The south and west perimeters shall be evaluated given the proximity of adjacent homes. After the initial assessment, re-evaluations are recommended every three to five years or sooner if obvious symptoms of decline present themselves.

REFERENCES

Vegetation Management Plan, Meridian Environmental Inc. April 2006King County Department of Permitting and Environmental Review Website

King Conservation District – Native Plant Descriptions

Snohomish County Conservation District - Native Plant Descriptions

Zobrist, Kevin W. 2014 Native Trees of Western Washington, A Photographic Guide. Washington State University Press

Appendix A – Site Photos

Upper Zone 3 - area mostly in grasses

Upper Zone 3 – successful rose species establishment

Upper Zone 3A – Successful snowberry establishment

Upper Zone 3A – re-sprouting of big leaf maple

Re-sprouting of cut big leaf maple

View above Zone 3C

Upper Zone 3, Infestation of Himalayan blackberry

Lower Zone 3C

Lower Zone 3B

Zone 4

Zone 4

Zone 4

Appendix B

Plant List – Appropriate Native Shrub Species for Upper Zone 3

Common Name	Species	Vegetative Characteristics
Vine maple	*Acer cininatum*	Tall deciduous shrub/wildlife
Beaked hazelnut/filbert	*Corylus cornuta*	Tall deciduous shrub/wildlife
Low Oregon grape	*Mahonia nervosa*	Low growing evergreen shrub.
Snowberry	*Symphoricarpos albus*	Medium height deciduous shrub.
Red flowering currant	*Ribes sanguineum*	Medium height deciduous shrub.
Indian plum	*Oemleria cerasiformis*	Medium height deciduous shrub.
Kinnikinnick	*Arctostaphylos uva-ursi*	Low growing evergreen shrub.
Salal	*Gaultheria shallon*	Low growing evergreen shrub.
Oceanspray	*Holodiscus discolor*	Medium height deciduous shrub.
Thimbleberry	*Rubus parviflorus*	Medium height deciduous shrub.
Red osier dogwood	*Cornus stolonifera*	Medium-Tall deciduous shrub.
Mock orange	*Philadelphus lewisii*	Medium-Tall deciduous shrub.

Plant List – Appropriate Native Species for Lower Zone 3 and Zone 4

Common Name	Species	Vegetative Characteristics
Vine maple	*Acer cininatum*	Tall deciduous shrub/wildlife
Beaked hazelnut/filbert	*Corylus cornuta*	Tall deciduous shrub/wildlife
Low Oregon grape	*Mahonia nervosa*	Low growing evergreen shrub.
Serviceberry	*Amelanchier alnifolia*	Tall deciduous shrub/wildlife
Snowberry	*Symphoricarpos albus*	Medium height deciduous shrub.
Red flowering currant	*Ribes sanguineum*	Medium height deciduous shrub.
Tall Oregon grape	*Mahonia aquifolium*	Medium height deciduous shrub.
Indian plum	*Oemleria cerasiformis*	Medium height deciduous shrub.
Salal	*Gaultheria shallon*	Low growing evergreen shrub.
Oceanspray	*Holodiscus discolor*	Medium height deciduous shrub.
Thimbleberry	*Rubus parviflorus*	Medium height deciduous shrub.
Shore pine	*Pinus contorta*	Medium height evergreen tree.
Western red cedar	*Thuja plicata*	Shade tolerant evergreen tree.
Western hemlock	*Tsuga heterophylla*	Shade tolerant evergreen tree.
Pacific dogwood	*Cornus nuttallii*	Medium to large deciduous tree.
Shore pine	*Pinus contorta*	Medium height evergreen tree.